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Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently amended) A lancing apparatus configured [[used]] for sampling a body fluid out of a skin, the apparatus comprising a housing including a cylindrical portion adapted to be brought into contact with the skin, an insertion element movable relative to the housing for sticking the skin, and a negative pressure generator configured to generate ~~that generates~~ a negative pressure inside the cylindrical portion to cause the skin to swell upward,

wherein the apparatus further comprises a height detector and a pressure controller configured to cooperate with the height detector, the height detector detecting that the skin has been raised to a predetermined height inside the cylindrical portion, the height detector being provided separately from the insertion element and including a tapered face that is adapted to come into contact with the skin when the skin swells upward, the pressure controller being configured to execute ~~executing~~ a control so as to maintain a pressure inside the cylindrical portion within a specific range, the control by the pressure controller being executed based on detection of ~~after~~ the height detector ~~has detected~~ that the skin has been raised to the predetermined height, the specific range being defined by granting a specific tolerance to a reference pressure that is set at a lower value than the pressure inside the cylindrical portion at a time that the height detector has detected that the skin has been raised to the predetermined height.

2. (Canceled)

3. (Currently amended) The lancing apparatus according to claim 1, further comprising a pressure detector that detects a pressure inside the cylindrical portion,

wherein the controller is configured to execute ~~executes~~ a control so as to maintain a pressure inside the cylindrical portion within a specific range, based on the pressure detected by the pressure detector.

4. (Canceled)

5. (Previously presented) The lancing apparatus according to claim 1, wherein the specific range has an upper limit and a lower limit which are set at a lower value than the pressure inside the cylindrical portion at the time that the height detector has detected that the skin has been raised to the predetermined height.

6. (Currently amended) The lancing apparatus according to claim 1, wherein the height detector is capable of detecting a fluctuation of the swelling height of the skin, and

wherein the controller is configured to control ~~controls~~ the pressure inside the cylindrical portion so as to maintain the swelling height of the skin at the predetermined level.

7. (Previously presented) The lancing apparatus according to claim 6, wherein the height detector includes a contacting member for contact with the skin when the skin has been raised to the predetermined height, so as to detect a contacting pressure of the skin applied to the contacting member.

8. (Currently amended) The lancing apparatus according to claim 7, wherein the controller is configured to control ~~controls~~ the pressure inside the cylindrical portion so as to maintain the contacting pressure within a set ~~the specific~~ range.

9. (Currently amended) The lancing apparatus according to claim 1, wherein the controller is configured to control ~~controls~~ the operation of the negative pressure generator so as to maintain a pressure inside the cylindrical portion within the specific range.

10. (Currently amended) The lancing apparatus according to claim 1, further comprising a relief valve located at a position communicating with the inside of the cylindrical portion,

wherein the controller is configured to control ~~controls~~ an opening and closing action of the relief valve so as to maintain the pressure inside the cylindrical portion within the specific range.

11. (Currently amended) The lancing apparatus according to claim 10, wherein the controller is configured to open ~~opens~~ the relief valve when the pressure inside the cylindrical portion becomes equal or generally equal to a lower limit of the specific range.

12. (Previously presented) The lancing apparatus according to claim 1, further comprising a backup chamber into which a gas inside the cylindrical portion flows when the pressure inside the cylindrical portion becomes equal or generally equal to an upper limit of the specific range, after generation of a negative pressure inside the cylindrical portion by the negative pressure generator.

13. (Original) The lancing apparatus according to claim 12, further comprising a gas supply selector controlled by the controller so as to select whether to supply a gas into the backup chamber.

14. (Currently amended) The lancing apparatus according to claim 13, further comprising a cylindrical portion pressure detector that is configured to detect ~~detects~~ a pressure inside the cylindrical portion,

wherein the gas supply selector comprises a relief valve that is configured to be opened or closed ~~opened or closed~~ according to a detecting result given by the cylindrical portion pressure detector.

15. (Original) The lancing apparatus according to claim 12, wherein the backup chamber can be decompressed by the negative pressure generator.

16. (Currently amended) The lancing apparatus according to claim 15, further comprising a backup chamber pressure detector that is configured to detect ~~detects~~ a pressure inside the backup chamber,

wherein the negative pressure generator is configured to decompress ~~decompresses~~ the backup chamber when a pressure detected by the backup chamber pressure detector exceeds a predetermined threshold value.

17. (Currently amended) The lancing apparatus according to claim 1, wherein the cylindrical portion includes an attachment base to which is removably attached a sampling element that is configured to sample ~~samples~~ a body fluid coming out of the skin by the insertion of the insertion element.

18. (Original) The lancing apparatus according to claim 1, wherein the cylindrical portion of the housing includes a plurality of members, and one or more of the members are removable from another.

19. (Currently amended) The lancing apparatus according to claim 1, further comprising a controller that is configured to control ~~controls~~ an insertion depth into the skin or an inserting speed of the inserting element, based on a pressure inside the cylindrical portion at a time that the height detector has detected that the skin has been raised to the predetermined height.

20. (Original) The lancing apparatus according to claim 1, wherein the negative pressure generator comprises an electric pump.

21. (Currently amended) A lancing apparatus used for sampling a body fluid out of a skin, the apparatus comprising:

a housing including a cylindrical portion that is adapted to be brought into contact with the skin;

an insertion element movable relative to the housing for sticking the skin;

a negative pressure generator that is configured to generate ~~generates~~ a negative pressure inside the cylindrical portion to cause the skin to swell upward;

a height detector that is configured to detect ~~detects~~ that the skin has been raised to a predetermined height inside the cylindrical portion, the height detector being provided separately from the insertion element;

a pressure detector that is configured to detect ~~detects~~ a pressure inside the cylindrical portion; and

a controller that is configured to execute ~~executes~~ a control so as to maintain a pressure inside the cylindrical portion within a specific range, after the height detector has detected that the skin has been raised to the predetermined height, the specific range being defined by granting a specific tolerance to a reference pressure;

wherein the controller that is configured to set ~~sets~~ the reference pressure based on the pressure detected by the pressure detector at a time that the height detector has detected that the skin has been raised to the predetermined height.

22. (Previously presented) The lancing apparatus according to claim 21, wherein the setting of the reference pressure is performed whenever the sampling of the body fluid is performed.

23. (Previously presented) The lancing apparatus according to claim 21, wherein the reference pressure is set at a lower value than the pressure detected by the pressure detector at the time that the height detector has detected that the skin has been raised to the predetermined height.

24. (Previously presented) The lancing apparatus according to claim 21, wherein the specific range has an upper limit and a lower limit which are set at a lower value than the

pressure detected by the pressure detector at the time that the height detector has detected that the skin has been raised to the predetermined height.

25. (Currently amended) The lancing apparatus according to claim 1, ~~A lancing apparatus used for sampling a body fluid out of a skin, the apparatus comprising:~~

~~a housing including a cylindrical portion that is adapted to be brought into contact with the skin;~~

~~an insertion element movable relative to the housing for sticking the skin;~~

~~a negative pressure generator that generates a negative pressure inside the cylindrical portion to cause the skin to swell upward;~~

~~a height detector that detects that the skin has been raised to a predetermined height inside the cylindrical portion, the height detector being provided separately from the insertion element; and~~

~~a pressure controller that executes a control so as to maintain a pressure inside the cylindrical portion within a specific range, after the height detector has detected that the skin has been raised to the predetermined height, the specific range being defined by granting a specific tolerance to a reference pressure that is set at a lower value than the pressure inside the cylindrical portion at a time that the height detector has detected that the skin has been raised to the predetermined height;~~

wherein the height detector comprises an optical sensor or a touch sensor.

26. (Currently amended) A blood sampling apparatus used for measuring glucose concentration in blood, the apparatus comprising:

a housing including a cylindrical portion that is adapted to be brought into contact with skin;

an insertion element movable relative to the housing for sticking the skin;

a negative pressure generator for generating a negative pressure inside the cylindrical portion to cause the skin to swell upward;

a height detector for detecting that the skin has been raised to a predetermined height inside the cylindrical portion; and

a controller configured to cooperate with the height detector for executing a control so as to maintain a pressure inside the cylindrical portion within a specific range, the control being executed based on detection of ~~after~~ the height detector ~~has detected~~ that the skin has been raised to the predetermined height;

wherein the specific range is defined by granting a specific tolerance to a reference pressure which is set at a lower value than the pressure inside the cylindrical portion at a time that the height detector has detected that the skin has been raised to the predetermined height.

27. (Canceled)

28. (New) The lancing apparatus according to claim 1, wherein the height detector is provided on a cylindrical internal surface of the cylindrical portion.

29. (New) The lancing apparatus according to claim 1, wherein the pressure controller remains inactive until the height detector detects that the skin has been raised to the predetermined height inside the cylindrical portion.

30. (New) The blood sampling apparatus according to claim 26, wherein the controller remains inactive until the height detector detects that the skin has been raised to the predetermined height inside the cylindrical portion